

This listing of claims will replace all prior versions of claims in the application.

Claims 1-22. (cancelled)

Claim 23. (new) A process for preparing a biological material for examination with a microscope whereby a transparent film for smoothing out irregularities on the surface of the biological material in order to improve visual characteristics of the biological material is applied onto a surface of the biological material, whereby the film is a laser light absorbing film.

Claim 24. (new) The process of claim 23 wherein the film is sprayed onto the surface of the biological material.

Claim 25. (new) The process of claim 23 wherein the film is brushed onto the surface of the biological material.

Claim 26. (new) The process of claim 23 wherein the film is applied onto the surface of the biological material by immersing the biological material in an immersion bath.

Claim 27. (new) The process of claim 23 wherein the film is not toxic.

Claim 28. (new) The process of claim 23 wherein the film is inert and when applied onto the biological material the biological material is not disadvantageously affected chemically or biologically.

Claim 29. (new) The process of claim 23 wherein the film contains a transparent preparation, mixture and/or pure substance.

Claim 30. (new) The process of claim 23 wherein the preparation, mixture or pure

substance is a preparation, mixture and/or pure substance selected from the group of short- or long-chain and/or totally or partly unsaturated acids and/or bases, poly-amides, -alcohols, -carbonates or silicones or mixtures thereof.

Claim 31. (new) The process of claim 23 wherein the film when applied onto the surface of the biological material has a character promoting the visual characteristics of the biological material with regard to balance of the refractive index, suppression of undesirable light scattering and/or improved visualization of the biological specimen.

Claim 33. (new) The process of claim 23 wherein the film is a UV laser light absorbing film.

Claim 34. (new) The process of claim 23 wherein the film has a preparation, mixture and/or pure substance soluble in an aqueous solution.

Claim 35. (new) The process of claim 23 wherein the film contains at least one substance for systematically affecting the visual characteristics of the biological material when radiated with light.

Claim 36. (new) The process of claim 35 wherein the film contains at least one substance preserving the RNA of the biological material when radiated with light.

Claim 37. (new) The process of claim 35 wherein the film contains at least one substance systematically affecting the fluorescence visual characteristics of the biological material.

Claim 38. (new) The process of claim 37 wherein the film contains a fluorophor for achieving a fluorescence with a certain light wavelength.

Claim 39. (new) The process of claim 37 wherein the film contains at least one substance, which prevents fluorescence with a certain light wavelength.

Claim 40. (new) The process of claim 39 wherein the substance is selected for prevention of fluorescence in such a manner that it prevents the fluorescence with the certain light wavelength by quenching in the sense of a Stern Vollmer analysis substantially more effectively with regard to bimolecular quenching than its self de-excitation permits with inherent uni-molecular kinetics.

Claim 41. (new) The process of claim 23 wherein the film has a preparation, mixture and/or pure substance dissolved in a solvent, which is carried on the surface of the biological material.

Claim 42. (new) The process of claim 41 whereby the solvent, in which the preparation, mixture and/or pure substance is dissolved, is a solvent selected from the group of short-chain alcohols, ketones, esters, benzenes or water.

Claim 43. (new) The process of claim 23 wherein the film is constituted in such a manner that after solidification in air it facilitates cutting and/or a catapulting of the film as well as of the biological material present underneath with a laser beam.

Claim 44. (new) Arrangement with carrier means and a biological material present on the carrier means, wherein a transparent film is applied onto the surface of the biological material for smoothing out irregularities in the surface of the biological material in order to improve the visual characteristics of the biological material for examination with a microscope, and whereby the film is a laser light absorbing film.

Claim 45. (new) A system comprising a carrier and a biological material present on the carrier, wherein a transparent film is applied onto the surface of the biological material for smoothing out irregularities in the surface of the biological material in order to improve the visual characteristics of the biological material for examination with a microscope, and the film is a laser light absorbing film.